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ZİHİN ENGELLİ ÇOCUKLARIN SOSYAL BECERİLERİ İLE ARTİKÜLASYON DÜZEYLERİ ARASINDAKİ İLİŞKİ[3]

Özet

Bu araştırmada, zihin engelli çocukların sosyal becerileri ile artikülasyon düzeyleri arasında bir ilişkinin olup olmadığını incelemek, sosyal becerilerin ve artikülasyon düzeyinin çeşitli değişkenler açısından farklılaşıp farklılaşmadığını belirlemek amaçlanmıştır. Araştırmanın örneklemini, 2010-2011 eğitim-öğretim yılında, Milli Eğitim Bakanlığı'na bağlı okullarda eğitim almakta olan 7-12 yaş arası, orta ve hafif düzeyde toplam 121 zihin engelli çocuk oluşturmaktadır. Araştırmada, zihin engelli çocukların sosyal becelerini belirlemek için Sosyal Becerileri Dereceleme Sistemi (SBDS) ve artikülasyon düzeylerini ölçmek için geliştirilen Ankara Artikülasyon Testi (AAT) kullanılmıştır. Araştırma sonucunda zihinsel engelli çocukların AAT puanları ile SBDS alt ölçekleri; sosyal beceri, problem davranış ve akademik yeterlilik puanları arasında yüksek düzeyde anlamlı bir ilişki bulunmuştur. Sosyal beceri, problem davranış ve akademik yeterlilik puanlarının; çocukların cinsiyeti, engel düzeyi, değişkenleriyle anlamlı bir ilişki bulunamamıştır. AAT puanlarıyla engel düzeyi değişkeni arasında anlamlı ilişki bulunmuş, cinsiyet değişkenine göre anlamlı ilişki bulunamamıştır.

Anahtar kelimeler: artikülasyon, zihin engelli çocuk, sosyal beceri,

RELATIONSHIP BETWEEN SOCIAL SKILLS AND ARTICULATION LEVELS OF CHILDREN WITH MENTAL DISABILITY

Abstract

The purpose of this study was to examine whether there was a relationship between social skills and articulation levels of children with mental disability and determine whether the social skills and articulation levels vary in terms of different variables. The sample group of the study consisted of 7-12 year old 121 children with mild and mid levels mental disability, attending schools bound to

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Ministry of Education at 2010-2011 education years in Istanbul. In the study, Social Skills Rating System (SBRS) was used to determine the social skills of children with mentall disbility and Ankara Articulation Test (AAT) was used to measure the articulation levels of children. According to the results of the study; between AAT scores of children with mental disability and SBDS sub-scales; social skills, problem behavior and academic competence, a high level meaningful association among the scores was found. No association was found between social skills, problem behavior and academic competence scores and the variables of gender and disability level of children. A significant association was found between the scores of AAT and the variable of level of disability but no association was found between the scores of (AAT) and the variable of gender.

Key words: articulation, child with mental disability, social skills

Introduction

Since beginning of life, people develop in social environments. The fact that humans are social creatures and that there is a social aspect to their being are key features that separate humans from other living things.

Within all social relationships throughout life, starting from birth, are the phenomena of forming social relationships and joining other social relationships. In this context, socialization occurs with and without awareness. Additionally, social development is one of the necessary elements of healthy socialization (Gulay & Akman, 2009). Individuals who socialize in a healthy manner can perform their social functions healthily. This provides individuals an opportunity to be happy and productive in all aspects of social life (Çifçi & Sucuoğlu, 2004). One of the most important products of the process of socialization that begins at birth is social skill.

Social skills include learning socially accepted behaviors that enable an effective interaction with others (Gresham & Elliot, 1990); correctly understanding social messages, social problem solving capacity and message sending capability (Liberman, Mueser & Wallace, 1986); interpersonal behaviors, behaviors related to self/identity, peer acceptance and communication skills (Elksnin & Elksnin, 1995); and the skills to form and develop positive social relationships and to manage expectations effectively (Kapikiran, Ivrendi & Adak, 2006). Social skills are the skills that enable individuals to make friends, be accepted by their peers and teachers, and be successful academically (Ford & Milosky, 2008); express positive and negative emotions appropriately, defend their personal rights, and to decline requests that are not suitable for them (Sorias, 1986).

Social skills are necessary for individuals to form and maintain positive social relationships with their peers, teachers, family, and others (Kolb & Hanley-Maxwell, 2003). Students, who have not acquired social skills or have but fail to use them are reported to display problem behaviors instead of social skills to attain what they desire (Gresham, 1997); inadequacy in social skills causes failures in academic competence (Ipek-Yukselen, 2003); and individuals, disabled or not, who experience social issues during childhood are at a higher risk of having internal and external problems (Clegg & Standen, 1991). According to Strain and Odom (1986), lack of social skills presents itself as the individual not having social skills or failing to use them appropriately if he had. Children with disabilities have limited social skills compared to children without

disabilities and this limitation causes them to have various problems while interacting with both their peers and adults (Sabornie & Beard, 1990). It is a well-known fact that mentally disabled children, compared to their normally developing peers, have limitations in cognitive skills, language and speech skills, and social skills. One of these limitations is that mentally disabled children have a limited ability to express themselves. These children have fewer attempts at socially interacting with their peers and respond to their peers' interaction efforts in ways that are meaningful to their peers (Beckman & Kohl, 1987; Guralnick & Groom, 1987). The difficulties in learning environments and lack of communication experienced by mentally disabled individuals can lead to deficiency in their social skills (Avcıoğlu, 2009). Studies report a positive association between severity of mental disability and social disability (Wing & Gould), meaning that as the severity of the mental disability increases, and the social skill deficiencies will also increase (Njardvik, Matson & Cherry, 1999). The lack of social skills and presence of problem behaviors among mentally disabled children lead them to have interpersonal relationship issues and have low social acceptance by their peers (Sabornie & Beard, 1990).

Mentally disabled children have difficulty in peer interactions as they do not have the same developmental progresses with their peers who developed normally. While social skill deficiency is the basis for this, their deficiencies in language and cognitive development accompany the social skills deficiency (Ipek-Yukselen, 2003). Both receptive and expressive language development issues can be observed among children impacted by different levels of mental disabilities (Ozmen, 2003). Language skills among mentally disabled children are important for they ease the social relationships they form and the interactions they have (Abbeduto &Boudreau, 2004). The studies on the relationship of cognitive ability, social skills, and behavioral problems with language and speech abilities show that there is an association between the levels of language competency and social competency of children with language impairment and/or emotional and behavioral problems (Farmer, 1997, 2000; Gallagher, 1993; Koning & Magill-Evans, 2001), who present to be more shy in the play areas (Fujiki, Brinton, Isaacson & Summers, 2001).

Fujiki, Brinton, Hart and Fitzgerald (1999) reported that when the complexity and the dynamic nature of the speech interactions, transmitted via language to large extent, are considered, it is not surprising that children with language impairments experience difficulty in social competence. Botting and Conti-Ramsden (2008) state that proper language speaking skills are important in development of social skills, and that deficiency in language skills or language impairments are the main causes of social disability. When the studies on social competence and language are considered, it has been proved via peer acceptance studies that social competence is associated with oral language skills (Snow & Powel, 2008). This finding confirms the association between the social skills and oral language skills of individuals with mental disabilities experiencing difficulty in oral language. Among children with mental disabilities and in many other disability groups, language is usually the most impaired area of development. Compared with the children at the same mental age who develop normally, children with mental disabilities are found to have poor language skills. Articulation errors, while not consistent, are reported to be more common among children with mental disabilities compared to children who develop normally (Shriberg & Widder, 1990). Issues observed in all dimensions of language and speech can be

defined to be based on the dimensions of sound production, fluency, pronunciation and components of language (phonology, morphology, syntax, semantics, usage). The most common of these language and speech issues are articulation (pronunciation) and phonology impairments (Topbas, 2006).

Problems experienced in communication and language development can lead to behavioral and learning disorders. It is inevitable that mentally disabled individuals who are unable to establish an effective and functional communication are bound to lead a life dependent on others that is isolated from the society with a limited structure (Eriskin, 2006). Language is a tool for people to express themselves. Individuals who cannot express themselves may feel incompetent. This feeling may affect their communications with others and their social skill acquisition. The articulation related problems experienced by children with mental disability may be considered to affect their acquisition of social skills. While studies have been conducted in Turkey on mentally disabled individuals' social skills (Ipek, 1998; Poyraz-Tuy, 1999; Çifçi, 2001; Avcıoğlu, 2001; Ipek-Yukselen, 2003; Sazak, 2003; Eldeniz, 2005; Sucuoğlu & Ozokçu, 2005; Çakır, 2006; Emecen, 2008; Ozokcu, 2008; Hocaoğlu, 2009; Ozkubat, 2010), these studies are still too few. No study, or a similar one, has been encountered where mentally disabled children's social skills and problem behaviors were examined from the language and speech impediment perspective. With this in mind, the research goal is to examine 'the relationship between the social skills and articulation levels of mentally disabled individuals.'

Accordingly, the present study was designed to evaluate the relationship between social skills and articulation levels of children with mental disability in relation to gender and the level of mental disability.

Methods

A total of 121 children with mild to moderate mental disability (79 males, 51 females, aged 7-12 years) who were attending schools bound to Ministry of Education during 2010-2011 academic years in Istanbul were included in this comparative study aiming to evaluate the relation between social skills and articulation levels of children with mental disability, using a relational screening model based on determination of the presence and/or the degree of covariance between two or more variables (Karasar, 2005)

Assessments of social skills

Social skills of children with mental disability was assessed by Social Skills Rating System (SSRS) which was developed to determine the competency of preschool and elementary school children's social skills and problem behaviors considered to be associated with these skills, along with their academic competencies (Gresham & Elliot, 1990). The validity of the scale, content and construct validity were tested in two different ways (Sucuoğlu & Ozokcu, 2005). Regarding content validity, experts' opinions were requested and the experts concluded that the SSRS as a whole was capable of measuring social skills. Principle components and varimax rotation techniques were employed in the factor analysis. Cronbach's alpha coefficients were between 0.84 and 0.96 for social skills scale, 0.86 and 0.93 for problem behaviors scale, and 0.93 for academic competence scale. SSRS was composed of three sub-scales including Social Skills Scale (SSS/Social Skills), Problem Behavior Scale

(PBS/Problem Behaviors) and Academic Competence Scale (ACS/Academic Competence).

Assessment of articulation

Articulation was assessed by Ankara Articulation Test (AAT), which is an articulation evaluation test for children between the ages of 2 and 12, developed by Ege, Acarlar and Turan (2004). It has been standardized through administering it on around 3000 children. Internal reliability alpha coefficient of AAT is 0.94 and its independent inter-rater agreement is 0.82. AAT is a standardized image-naming test, consisting of 48 colored images where sounds are used in 5 positions. The 19 consonant phonemes in Turkish and 4 consonant sets are testes in words and in different positions. The score is calculated by counting the errors (Ege, Acarlar & Turan, 2004).

Data collection and procedures

The study period has been determined as the 2010-2011-academic year. To gather the sample, an application to the Department of Culture at Istanbul Directorate of National Education has been made and the necessary permissions to administer the study were obtained from the relevant schools that are bound to Elementary Schools within the Ministry of Education in Istanbul**.** An appointment was obtained from the managers of elementary and special education schools in the Istanbul district bound to Ministry of Education, during which the study aims and the tools to be used in the study were explained. For data collection purposes, the children between the ages 7 and 12 who had mild or moderate mental disability were identified via screening their Hospital and Counseling Research Center (CRC) reports and the teachers were asked to fill out the SSRS forms for these children. AAT was administered to mentally disabled children via face-to-face interview in a quiet room with no time limit No changes were made on the AAT administration criteria while administering it to mentally disabled children. When the incomplete and the erroneously filled out forms were excluded from the study, the data obtained from a total of 121 students were entered into and analyzed using the SPSS 13.0 package.

Results

A total of 121 participants consisted of 79 male and 51 female students were included in the present study. Among the participants, 65 had moderate, and 56 had mild disabilities.

Table 1. Correlations between SSRS (SSS, PBS, ACS) and AAT scale scores

Variables	N	R	p value
Social Skill Scale Problem Behavior Scale	121	-.346	**0.000**
Social Skill Scale Academic Competence Scale	121	.543	**0.000**

Academic Competence Scale Problem Behavior Scale	121	-.360	**0.000**
Ankara Articulation Test Social Skills Scale	121	-.462	**0.000**
Ankara Articulation Test Problem Behavior Scale	121	.192	**0.035**
Ankara Articulation Test Academic Competence Scale	121	-.404	**0.000**

Pearson Product Moment Correlation analysis

There were significant negative correlations between scale scores of SSS and PBS (r=-0.346; p<0.01), ACS and PBS (r=-0.360; p<0.01), AAT and SSS (r=-0.462; p<0.01) as well as AAT and ACS (r=-0.404; p<0.01). There were significant positive correlations between scale scores of SSS and ACS (r=0.543; p<0.01), and AAT and PBS (r= 0.192; p<0.05).

Table 2. SSRS (SSS, PBS, ACS) and AAT scale scores in relation to gender

Score	Groups	n	Mean	SD	Sh_x	t test		
						t	Sd	p value
SSS	Male	70	27.67	12.836	1.534	-1.879	119	0.063
	Female	51	32.20	13.403	1.877			
PBS	Male	70	24.93	14.89	6.868	1.676	119	0.096
	Female	51	19.20	12.82	6.424			
ACS	Male	70	23.91	9.182	1.097	-1.173	119	0.243
	Female	51	25.90	9.229	1.292			
AAT	Male	70	24.93	22.755	2.720	1.425	119	0.157
	Female	51	19.20	20.525	2.874			

Independent groups t-test

There was no significant gender influence on the mean scale scores of SSS (t=-1.879; p>0.05), PBS (t=1.676; p>0.05), ACS (t=-1.173; p>0.05) and AAT (t=1.425; p>0.05)

Table 3. SSRS (SSS, PBS, ACS) and AAT scale scores in relation to level of disability

Score	Groups	n	Mean	SD	Sh_x	t test: t	t test: SD	t test: p value
SSS	Moderate	65	27.69	13.325	1.653	-1.705	119	0.091
	Mild	56	31.77	12.857	1.718			
PBS	Moderate	65	14.57	6.235	.773	0.972	119	0.333
	Mild	56	13.38	7.278	.973			
ACS	Moderate	65	23.88	8.708	1.080	-1.127	119	0.262
	Mild	56	25.77	9.753	1.303			
AAT	Moderate	56	30.17	23.743	2.945	4.448	119	**0.000**
	Mild	56	13.63	15.636	2.089			

Independent groups t- test

There was no significant difference in scale scores of SSS (t=-1.705; p>0.05), PBS (t=0.972; p>0.05), ACS (t=-1.127; p>0.05) with respect to level of mental disability, whereas AAT scores were significantly higher in moderate mental disability compared with mild level of the disorder (30.2 (23.7) vs. 13.6(15.6), t=4.448, p<0.001)

Discussion

The study findings yielded a highly significant negative association between the social skills and problem behavior levels while a highly significant positive association between the social skills and academic competence levels of children with mental disabilities. When the relationship between the AAT scores and the SSS scores was examined, it was observed that the SSS scores decreased as the AAT scores increased. This finding means that as the articulation errors of the students decrease, their social skills increase. Literature reviews, in accordance with the study findings, confirm that studies have found an association between social skills and problem behaviors (Coie & Dodge, 1983; Gresham, 1986; Parker & Asher, 1987; Gresham & Elliot, 1990; Sargent, 1998; Gresham, 1997, Conti-Ramsden & Botting, 2004; Sucuoğlu & Ozokcu, 2005; Ray & Elliott, 2006). Clegg and Standen (1991) report that the problem behaviors of both the mentally disabled and normally developing children are associated with their lack of social skills and the social problems these children display form a basis for social issues they will experience as adults as well.

Merrell (1993) defined problem behaviors as behaviors that have negative consequences such as a delay in the necessary socialization and peer rejection; and stated that one of the causes of the lack of social skills are the problem behaviors

displayed by children. Çağdaş and Secer (2002) reported that (1) the individuals who have not acquired social skills will be unable to effectively communicate with the people around them; (2) the communications individuals who lack speech and discussion skills will soon turn intro conflicts; (3) the individuals who lack the helping, sharing, cooperating, and good social relationship forming skills will not be able to live with others in harmony; and (4) the children and adults in these conditions may fail at attaining their goals.

It has been reported that the mentally disabled children have negative and undesired behaviors, are not accepted by their peers, display a lack of social skills in their interactions with peers and adults, and generally tend to have poorer social skills compared to their peers who develop normally (Gresham &Elliott, 1987; Parker & Asher, 1987; Kocamese-Kozanoglu, 2005). Researchers express that social skills and academic performance are related (Wentzel, 1991; Ipek-Yukselen, 2003; Demaray & Malecki, 2002; DiPema & Elliott, 2002; Caprara, Barbaranelli, Pastorelli, Bandura & Zimbardo, 2000). In their study, Ray and Elliott (2006) reported that compared to their peers, children with behavioral problems have lower social adjustment skills; that the social support, self-concept, and social skills, which form the social cohesion's basis vary by children's academic competence and problem behavior levels; and that children's positive social foundation will prepare the grounds for their academic success. Literature reviews show that children impacted with disabilities display problem behaviors more and have a lower academic performance (Clegg & Standen, 1991; Gresham, 1997; Marzano & Marzano, 2003; Semmel & Gao, 1992; Sucuoğlu & Ozokcu, 2005). Findings from literature reviews point to the fact that lack of social skills may be the cause of problem behaviors and low academic competence. Our findings are as expected and consistent with the literature. One of the causes of the lack of social skills is the problem behaviors children display. Problem behaviors are defined as behaviors with negative consequences such as a delay in the necessary socialization and peer rejection. Problem behaviors, whether they have an anti-social component (e.g. attempt on others' rights) or have a direct negative social consequence, are social behaviors by nature (Merrell, 1993). It is claimed that the social problem behaviors intervene with the way social skills are displayed and the behavior, leading to lack of social skills; in other words, there is a negative association between social skills and problem behaviors (Gresham & Elliot, 1990). In addition, children who have not acquired social skills or have but fail to use them are reported to display problem behaviors instead of social skills to attain what they desire (Elliott & Gresham, 1993; Gresham, 1997).

A highly significant negative association has been found between mentally disabled children's AAT scores and SSS scores in this study. This finding suggests that the social skills level of children with more articulation errors is lower than that of children with less or no articulation errors. It can be interpreted as children with articulation impairment have a lower level of social skills compared to children with no articulation impairments, and that articulation impairment is one of the factors impacting the level of social skills. This finding is also consistent with many studies conducted on this matter. An association has been observed between the language competence and the social skills of children with language impairments, and that children with language impairments have difficulty with social skills (Brinton & Fujiki, 1994; Farmer, 1997, 2000; Gallagher, 1993, 1999; Fujiki et al., 1999; Koning & Magill-

Evans, 2001). Other similar studies report that children with speech impairment and/or speech disorders have low social competence (Craig, 1993).

Botting and Conti-Ramsden (2008) state that proper language speaking skills are important in development of social skills while the deficiencies in language skills or language impairments are the main causes of social disability. Because of the association between social skills and oral language skills, clinicians focus on social skill trainings while working with children who have speech impairments (Brinton, Robinson & Fujiki, 2004). Researchers have shown that children with better language skills socialize more with their friends during play (Sigman & Ruskin, 1999) and show a higher level of adaptation in the games they play with peers in classroom settings (Mendez, Fantuzzo & Cicchetti, 2002). Howlin, Mawhood and Rutter (2000), examining the language and its social consequences, did a follow up of children with severe communication impairments in three dimensions. The researchers found that language abilities are associated with social consequences, social adaptation, and social cognitive skills. Craig and Washington (1993) examined the one-on-one interaction skills of children with language impairment. They found that when the language age of the children with language impairment were paired with their peers, these children took longer to enter into one-on-one interactions and that even when their peers started a verbal interaction they did not reciprocate. This can be interpreted as the difficulties experienced in social interactions, which are an important aspect of social skills, by children with language impairments, may negatively impact their social skills. Studies conducted on mentally disabled children with speech impairments state that disabled children with language and speech impairments experience many social difficulties (Aram, Ekelman & Nation, 1984). Our findings showed that there is a highly significant negative association between the AAT and PBS scores. It has been concluded that the problem behavior level of children with more articulation errors are higher than that of children with less or no articulation errors. Literature also suggests that children with speech impairments display problem behaviors more often (Baker & Cantwell, 1987; Camarata, Hughes & Ruhl, 1988; Brinton & Fujiki, 1994; Craig, 1993; Fujiki, Brinton & Todd, 1996).

Snow and Powel (2008) report that children with speech impairments and poor social skills, within their everyday struggle to keep up with the highly verbal structure of life, often use single syllable words and shrug of the shoulders and are not good at making eye contact. They report that these behaviors can easily be interpreted as lack of social relationships rather than lack of communication skills, which may lead to serious social disabilities. Moving forward with this findings, it can be interpreted that the mentally disabled children, due to their speech impairments, can have problems expressing themselves in social settings such as school, classroom, within the family, and various other social environments; not being understood by the people surrounding them such as their teachers, parents and peers can distress them; and the difficulties s/he experience expressing his/herself may lead to problem behaviors. In our study population, the AAT scores and the ACS scores of the mentally disabled children were highly significantly associated in a negative direction. Children with more articulation errors had a lower academic competence than children with less or no articulation errors. Findings in literature are similar to ours. Children with language and communication problems were reported to be at high risk in terms of academic difficulties (Abbeduto & Boudreau, 2004). This can be interpreted as mentally disabled

children with articulation impairment will have difficulty expressing themselves in school and classroom settings, will be shy to ask their peers and teachers questions when not understanding something, experience difficulty being understood when asking a question, and have a hard time expressing his/herself when speaking in class or during academic activities. Considering these, it is expected that their academic competence with be lower than their peers with no articulation impairments. The study findings did not yield a gender difference in mentally disabled children's social skills level. This finding is also in accordance with literature (Şahin, 1999; Çifçi & Cora-İnce, 2002; Sucuoğlu, 2003; Bacanlı & Erdoğan, 2003; Seven, 2006). However, there are also studies reporting that social skills are significantly associated with gender (Riggio, 1986; Gresham, Noell & Elliot, 1996; Sucuoğlu & Ozokcu 2005; Seven, 2008; Ozkubat, 2010).

While no significant difference is observed between males and females on the cooperation skills subscale of SSRS developed by Gresham et al. (1996), the females are found to have higher total social skills scores than males. Seven (2006) believes that the more social skills behavior display of girls than boys is a result of the families and society's gender role expectancies of children. Based on the study findings, no significant difference by gender was observed in mentally disabled children's problem behaviors. There are studies in literature supporting the finding of lack of a significant difference by gender in problem behaviors and academic competence (Tasse, Aman, Hammer & Rojahn, 1996; Çifçi and Cora-Ince, 2002; Sucuoğlu, 2003; Ipek-Yukselen, 2003; Hocaoğlu, 2009). Ipek-Yukselen (2003) reports that the lack of a significant difference between boys and girls among the mentally disabled children shows that gender is not an important indicator of children's social skills and problem behaviors. On the other hand, it has also been reported that gender impacts problem behaviors and that male students display problem behaviors more often than females, while no significant difference is observed between the genders in terms of academic competence (Sucuoğlu & Ozokcu, 2005). Findings from literature review shows that social skills, problem behaviors, and academic competence differ significantly by gender and that they do not have consistent differences based on gender difference. In this aspect, our findings seem to be in line with the literature. Likewise, similar to past studies in the literature, our findings revealed no significant difference of gender influence on AAT scores (Walker, Archibald, Cherniak & Fish, 1992; Tsao & Weismer, 1997; Robb, Maclagan & Chen, 2004; Amir & Grinfeld, 2011). Additionally, results of a 3-year follow-up study on articulation in children by Walker and Archibald (2006) revealed that gender was not an indicator of articulation rates. In contrary to past studies in literature indicating that the disability level does impact social skills, problem behaviors, and academic competence, no significant difference by level of disability was observed on children's social skills, problem behaviors, and academic competence in our study population. Wing and Gould (1979) reported a positive correlation between severity of mental disability and social disability, and that children with severe mental disabilities have more social skill disabilities than those with mild and moderate mental disabilities. Low intellectual level is an important indicator of increased problem behaviors. It is evident that mentally disabled individuals, compared to their peers, have delayed cognitive and social development, and have difficulty in adaptive behaviors. However, it can be reasoned that when the disability level classification is based on the child's IQ level, a child that has acquired social and adaptive behaviors may display more social skills, more academic competence, and fewer problem behaviors than a

child with a greater IQ score. Our findings revealed a significant difference in AAT scores with respect to levels of the mental disability indicating significantly higher number of articulation errors in the moderately disabled group than children with mild and moderate mental disabilities. Erdebil, Dasdogen, Citav, Tezel, Bengisu & Tortop (2008) reported that the language development of mentally disabled individuals progressed slowly in direct proportion to the severity of their disability. Abbeduto and Boudreau (2004) on the other hand, reported that language problems in individuals with mental disability, to a great extent, were associated with their general cognitive abilities and IQ. Literature reviews show that intellect is an indicator of language skills. This result is consistent with our findings.

Conclusion

In conclusion, our findings concerning evaluation of the relationship between social skills and articulation levels of children with mental disability in relation to gender and the level of mental disability revealed that articulation errors was correlated negatively with social skill and academic competence scales of SSRI while positively with problem behavior scale. Articulation errors were more common in children with moderate than mild levels of mental disability while there was no gender influence on either SSRI or articulation scores. For future studies, use of different data collection methods (observation, interview, video recording, etc.) may be useful to evaluate the social skills and language/speech problems of children with mental disabilities.

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